



Erosion & Sediment Control Standards for Building Construction on less than 1 Acre City of Louisburg, KS

Standards for building construction projects that disturb less than 1 acre
and do not require a Land Disturbance Permit.

Introduction

This policy contains standard plans and procedures sufficient for building construction projects in the area that disturb less than one acre. Projects that disturb more than 1 acre, or are part of a subdivision or project that disturbs more than one acre must obtain a NPDES permit from the Kansas Department of Health and Environment (KDHE) and a Land Disturbance permit from the City of Louisburg.

It is a violation of City regulations to allow harmful amounts of silt to enter a road ditch, gutter, storm sewer, stream, or to cross a property line. Regulations also require erosion and sediment control on all projects, and this booklet was developed to help provide guidance for single-family lot construction and other small projects disturbing less than 1 acre.

The plans and procedures provided in this booklet address typical locations. This booklet does not address all circumstances that can be encountered in a project. The primary objective on small projects is perimeter control by using Best Management Practices (BMPs) to minimize erosion and prevent sediment from leaving the site. When adapting these standard plans to your construction project, always keep in mind the intent is to minimize erosion and prevent sediment leaving the site. The typical drawings anticipate home construction, but are applicable to other types of building projects.

The building permit holder is responsible for ensuring that adequate BMPs are in place and functioning until the construction project is completed. The building permit holder is also responsible to the City for actions of all subcontractors and suppliers. This includes tracking of mud onto the street and other actions which may cause erosion, sediment, or damage to any BMPs.

In subdivisions, both the individual home builder, as well as the subdivision developer, have responsibilities for erosion and sediment control. The builder is generally responsible for BMPs on the builder's lot and for actions of workman, subcontractors, and suppliers. The subdivision developer will have a Land Disturbance Permit from City of Louisburg and an NPDES Permit from KDHE which makes the developer responsible for the overall subdivision and certain BMPs for that subdivision such as sediment basins and curb inlet protection.

Best Management Practices

BMPs are the facilities and construction techniques used to control erosion and sediment on the project. Examples include, but are not limited to, sediment fence, bale checks, straw mat, temporary seeding and mulching, inlet protection, and construction staging.

Best Management Practices

Following is a typical sequence of activities on a small building project:

- 1) Inlet Protection** – If adjacent street has curb and gutter, install curb inlet protection at the first inlet downstream. If the curb inlet protection has been provided by the developer, ensure that it is working properly. Install protection around storm sewer area inlet on or near the property, if any.
- 2) Protection of Adjacent Lots** – On urban density lots, install silt fence or other BMPs along the common lot line of adjacent sodded or seeded lots.
- 3) Determine limits of disturbed area and install perimeter BMPs.** On large lots, flag area to be disturbed by grading, cutting, filling and utility installation. Flag limits of area to be disturbed to keep from unnecessarily disturbing land. Assess site drainage and pick a standard drawing of BMPs to use on this site. Install silt fence where water sheets off the construction site.
- 4) Grading/Excavating** - Install all perimeter BMPs prior to any grading or excavating activities.
- 5) Stabilize Stockpiles** - Install BMPs to stabilize stockpiles of dirt or other erodable material to prevent sediment from reaching the street or breaching perimeter protection. This might include covering the stockpile, or additional silt fence around the stockpile.
- 6) Temporary Construction Entrance** – A temporary construction entrance is required at the beginning of the grading process.
- 7) Sanitary Facilities** – Prior to the footing inspection, employee sanitary facilities must be available within 500 feet.
- 8) Backfill and Trash Facilities** – Inspect all BMPs and make adjustments for new grade after foundation is backfilled. Complete installation of all BMPs per the specified typical drawing, i.e., Type A, B, C, or Large Lot. Install trash dumpster after the foundation wall is backfilled.
- 9) Housekeeping** – The site must be managed for solid and hazardous waste which includes: providing trash containers and regular site maintenance for proper disposal of scrap building material, product/material shipping waste, food containers, and cups; and providing containers and proper disposal for waste paints, solvents, and cleaning compounds. The site must have available toilets for proper disposal of sanitary sewage. The site also must have secondary containment for fuel or liquid storage tanks to minimize the effects of a leak or spill.
- 10) Maintenance** - The builder is responsible for maintaining and repairing all BMPs as needed throughout construction. Failure to have BMPs properly placed and maintained will delay required inspections for your building.
- 11) Final Grading** - BMPs may be removed in order to complete final grading and sodding of the lot. If sodding of the lot is delayed, the builder or lot owner is required to maintain BMPs until the sod can be put down.

Builder Responsibilities

- 1) The builder is responsible for the on-going maintenance of all lot specific erosion and

sediment control devices until the lot is sodded.

2) During construction the builder shall perform periodic inspections to ensure erosion and sediment control measures are functioning as designed. In addition to periodic inspections, an inspection shall be conducted after each rain event. Any problems noted during these inspections shall be corrected immediately.

3) Once construction has commenced, the builder is responsible for the maintenance of erosion and sediment control measures protecting inlets on their lots, as well as curb inlets along the street frontage. It is critical that sediment not be allowed to enter the storm sewer system.

4) The temporary construction entrance provides a place for parking vehicles off-street and a spot where material can be off-loaded. The intent of the requirement is to provide a stable surface for parking vehicles where mud and other debris is not likely to be tracked onto the street.

5) **During the entire construction process the builder is responsible to ensure that mud, dirt, rocks and other debris are not allowed to enter onto streets and sidewalks, nor be tracked onto streets by construction vehicles.** Any mud or other debris on the street shall be removed by the builder.

Sediment Fence Maintenance (silt fence)

1) Inspect sediment fences at least once a week and after each rain event. Make needed repairs immediately.

2) If the fabric of the sediment fence collapses, tears, decomposes or becomes ineffective, replace promptly.

3) Remove the sediment deposits as necessary to provide adequate storage volume for the next rain and to reduce pressure on the fence. Take care to avoid damaging or undermining the fence during cleanout.

4) The installation of utility service lines may damage the BMPs, and if not repaired by the utility contractor, shall be repaired by the builder.

Inspections

Building Codes

On projects with a building permit, City of Louisburg Building Codes inspectors may inspect erosion and sediment control measures in conjunction with routine inspections. Inspections will ensure that proper placement and installation of erosion and sediment control measures are in place. For any called-for inspection, the Building Codes inspector may note the condition of the BMPs and if the BMPs are not in place or not being properly maintained, the inspector may require the inspection be rescheduled.

The first BMPs inspection will ordinarily occur at the time of the footing inspection, and this is the primary inspection for BMPs. As noted in the general sequencing notes, standard items to be checked are: protection of adjacent lots, inlet protection, perimeter BMPs, stabilized stockpiles, temporary construction entrance, concrete washout area, and sanitary facilities. If BMPs are not installed in the correct location or not installed correctly, the footing inspection may be rescheduled.

It is anticipated that by the time of the called-for inspection after the foundation wall inspection backfilling of the foundation will have been complete and all erosion and sediment control measures will have been installed, including a trash dumpster.

On some projects there may be situations that fall outside of the conditions anticipated by the standard drawings. The Building Codes inspector can be consulted about these situations when on site doing a called-for inspection. The builder may be referred to the Public Works Department.

Public Works

The City of Louisburg Public Works is the principal department for enforcement of the erosion and sediment control regulations. The Building Codes Inspector may also issue citations for violations of City regulations related to erosion and sediment control. The City's inspector may make random visits to the site, and may issue citations for violations of city regulations related to erosion and sediment control.

Common violations are:

1. Tracking of mud onto the public street or road.
2. Detrimental amount of silt crossing the property line or entering the storm drainage system
3. Failure to properly maintain BMPs.
4. Allowing litter or other material to blow off site.
5. Failure to obtain a permit for work exceeding one acre of disturbed area.
6. Failure to maintain documentation on projects with a KDHE and City permit.

On construction projects there may be situations that fall outside of the standard drawings. The City inspector will be available to discuss erosion and sediment control measures for any lot and the sequencing for installation. If a builder has questions or concerns, call Public Works Supervisor at 913-837-5371 ext. 111 to arrange a site meeting with the City Inspector.

Construction Specifications

Temporary Construction Entrance

Any required temporary construction entrance shall be constructed of 2-3 inch rock and shall be at least 24 feet wide and 50 feet long (unless length has to be less in urban density lots due to inadequate front yard). Thickness of the rock shall be adequate to support construction traffic and must be a minimum of six inches. The purpose of the temporary entrance is so delivery trucks, concrete trucks, and others can pull in and out of the site without tracking mud onto the road. The temporary construction entrance will occasionally need to be cleaned of accumulated mud and dirt.

Silt Fence

- 1) Dig a trench at least 6 inches deep along the fence alignment.
- 2) Drive posts at least 18 inches into the ground on the downslope side of the trench. Space posts a maximum of 6 feet.
- 3) Fasten support wire fence to upslope side of posts, extending 6 inches into trench.
- 4) Attach continuous length of fabric to upslope side of fence posts. Try to minimize the number of joints. Avoid joints at low points in the fence line. Where joints are necessary, fasten fabric securely to support posts and overlap to the next post.
- 5) Place the bottom 1 foot of fabric in the 6 inch deep trench (minimum), lapping toward the upslope side. Backfill trench with compacted earth or gravel.

Curb Inlet Protection

Use standard gravel filter bag arrangement for curb inlet protection. The bags are burlap or synthetic net about 24 inches long and 6 inches high. Bags are filled with 3/4 inch screened rock and placed around the inlet area with no evident gaps between the bags.

Area Inlet Protection

If the area inlet is complete, gravel filter bags as described above may be placed around the inlet. If the area inlet is not completed it may be necessary to use staked hay bales placed around the inlet. Hay bales should be tightly packed and staked down with at least two 2" x 2" x 4' stakes per bale.

Enforcement & Penalties

- A. The Public Officer and/or Codes Enforcement Officer shall enforce the provisions of this policy through routine activities that include receiving inspection reports from the permit holder when requested, inspections, and communication with developers and/or contractors. However, if these methods fail, the Public Official or Codes Enforcement Officer may proceed with any or all of the following enforcement or penalty measures:
1. *Refusal of inspection.* Request for an inspection for any permitted construction activity may be denied if it is found that erosion and sediment control measures have not been implemented, are found to be ineffective, or are not maintained. If an inspection is refused, a notice of violation or a stop work order may be issued. No further inspections will be performed until the erosion and sediment control measures have been implemented or violations of this Policy are abated.
 2. *Notice of violation.* The Public Officer and Codes Enforcement Officer are authorized to serve a notice of violation on any person found to be doing work in violation of the provisions of this Policy. Such notice shall direct the discontinuance of the illegal action or condition and order the abatement of the violation by the responsible person.
 3. *Stop Work Order.* The Public Officer and Codes Enforcement Officer are authorized to issue a stop work order for any or all construction activity within the established boundary of the permit. The stop work order shall be in writing and shall be given to the property owner involved, for the property owner's agent or to the person doing the work. In addition, notice of the stop work order shall be posted on the site. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work will be permitted to resume. Any person who shall continue to work after having been served with a stop work order, except such work as that person is directed by the City to perform to remove a violation or unsafe condition, is guilty of a public offense and may be subject to penalties as prescribed below.
 4. *Abatement.* Should any person fail to comply with the provisions of this Policy, the Public Officer or Codes Enforcement Officer are authorized to correct or abate such violation.
 - a. City expenditures to correct or abate a violation shall be assessed as a fee against the permit holder. The City will keep record of the abatement costs. The fee shall

be paid prior to recommencement of work on the site and prior to any further inspections. If the fee is not paid within thirty (30) days of the date of the invoice is sent to the permit holder, the Public Officer is authorized, as the Public Officer deems appropriate, to expend additional abatement funds to provide permanent soil stabilization on the site. Such additional expenditures shall also be assessed as a fee against the permit holder.

- b. Should the permit become suspended, revoked or expired with the fee not paid, all City expenditures to correct or abate the violation may be assessed against the BMPs Security. Abatement lien and special assessment and collection procedure shall apply if work is done without the issuance of a permit. The City Clerk, at the time of certifying other City taxes, shall certify the unpaid portion of the costs and the County Clerk shall extend the same on the tax rolls of the County against the lot or parcel of land.

B. Violations and Penalties

1. Any person who violates a provision of this Policy, fails to comply with any of the requirements thereof or fails to comply with a directive issued by the Public Officer or Codes Enforcement Officer is guilty of a public offense and shall be subject to penalties as provided above.
2. The Public Officer or Codes Enforcement Officer shall be permitted to cite the property owner, or any/all persons identified on a permit as being legally responsible to the City for any violations of the Chapter pertaining to that permit.

Variances

- A. The Public Officer or Building & Zoning Coordinator may grant a variance to the erosion and sediment control standards, provided all of the following conditions are met:
 1. The variance complies with the general spirit and intent of the erosion and sediment control standards.
 2. The granting of the variance will not adversely affect the rights of adjacent landowners.
 3. The granting of the variance will not result in substantial public expense, create nuisances, cause fraud on or cause harm to the public or conflict with existing local, Federal or State laws, rules or regulations.
 4. The variance will not adversely affect the public health, safety, morals, order, convenience, prosperity or general welfare.
- B. Appeals of decisions made by the Public Officer or Building & Zoning Coordinator related to erosion and sediment control standards shall be made to the City of Louisburg Board of Zoning Appeals.

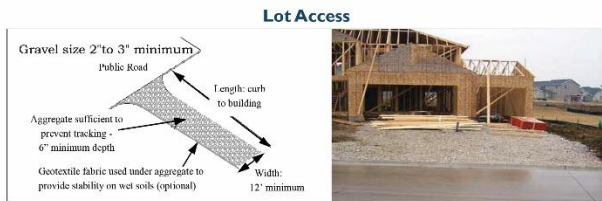
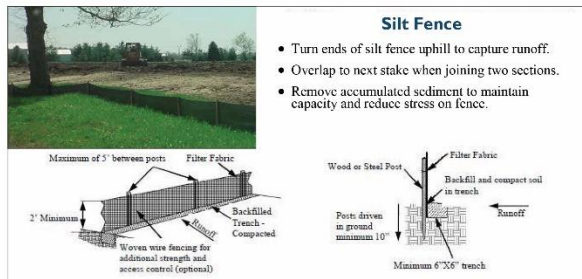
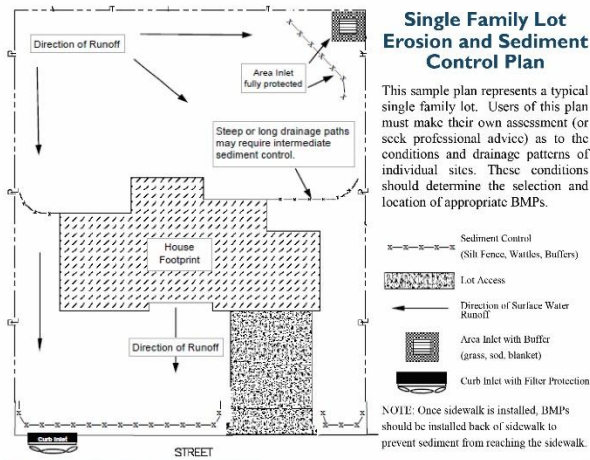
Penalties for Violations – Actions

The violation of any provision of this Policy is a misdemeanor, and any person, firm, association, partnership or corporation convicted thereof shall be punished by a fine not to exceed five hundred dollars (\$500.00); and the City shall further have the authority to maintain suits or actions in any court of competent jurisdiction for the purpose of enforcing any provisions of this Policy and to abate nuisances maintained in violation thereof; and in addition to other remedies,

institute injunction, mandamus, or other appropriate action or proceeding to prevent such unlawful erection, construction, reconstruction, alteration, conversion, maintenance, or use, or to correct or abate such violation, or to prevent the occupancy of the building, structure, or land. Each day any violation of this Policy shall continue shall constitute a separate offense.

Miscellaneous

Other laws. Neither this Policy nor any administrative decision made under this Policy exempts the permit holder or any other person from other requirements of this Title, State and Federal laws, or from procuring other required permits, including any State or Federal stormwater permits authorized under NPDES, or limits the right of any person to maintain, at any time, any appropriate action at law or in equity, for relief or damages against the permit holder or any person arising from the activity regulated by this Policy.



Silt Fence Alternatives

Straw wattles, compost logs, silt dikes, grass buffers and mulch are good alternatives to silt fence, reducing erosion and filtering sediment. These BMPs can be installed in all weather conditions and are easily repaired if necessary. They are appropriate for perimeter control on most individual building lots. Installation of manufactured products should follow the instructions provided with the product.

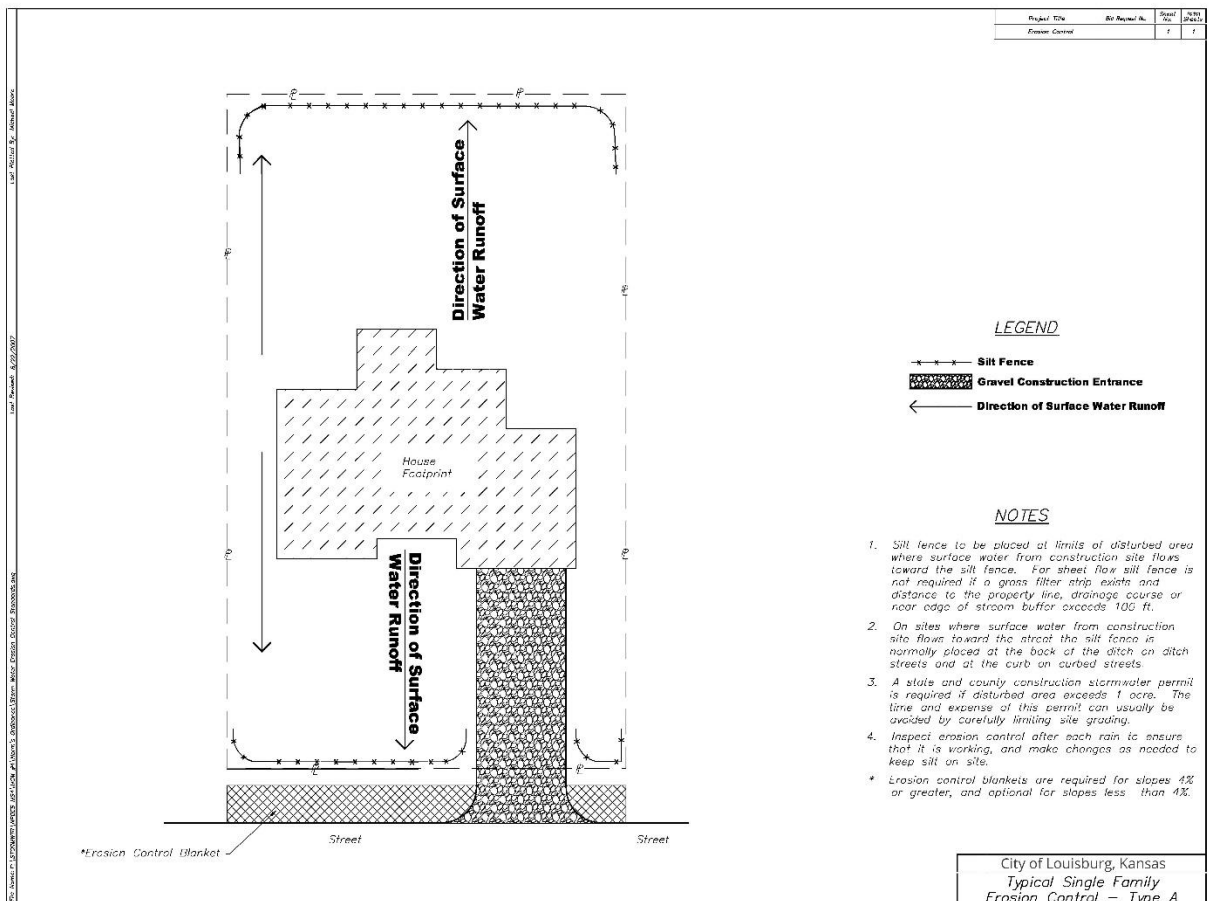


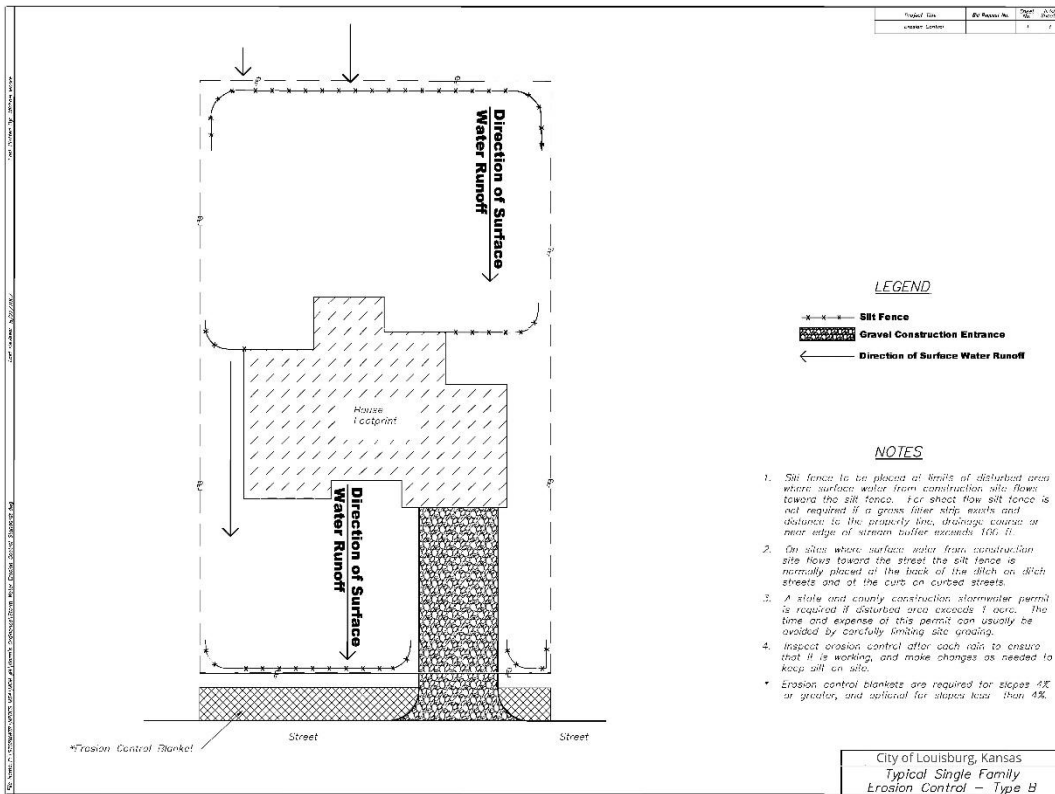
Inlet Protection

Many products are available for inlet protection. Regular maintenance of all inlet BMPs is critical to prevent localized flooding and to prevent sediment from entering the stormwater system. Area inlets can be protected with a stabilized buffer and wattle placed in front or by wrapping the inlet with reinforced silt fence. Curb inlets can be protected with a manufactured product or clean gravel placed in a non-biodegradable bag.

Other Pollutants

In addition to sediment, other pollutants must also be controlled on a construction site. Some common pollutants requiring BMPs include, but are not limited to, concrete washout, mechanical fluids, paint, stucco, sanitary waste, trash and dewatering discharge.





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